

### MLS track AVE Flight for Wednesday June 22, 2005

Takeoff: 1330LT (1830Z)  
Nominal Duration: 5.5 hrs  
Landing: 1900 LT (2400Z)

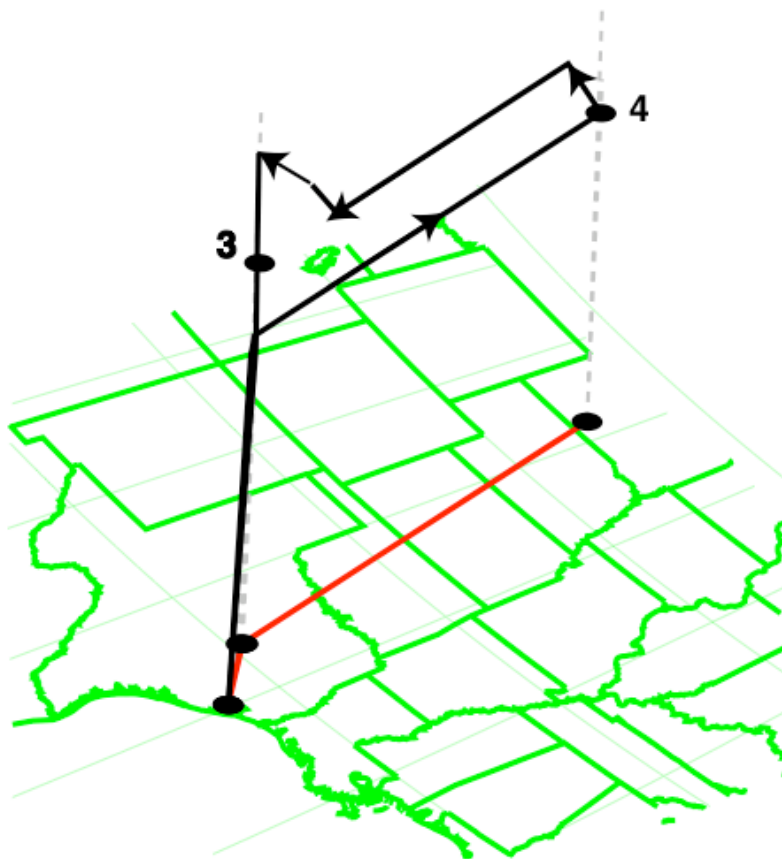
#### AVE Flight Objective:

Provide: 1) make in-situ observations for the MLS and OMI satellite instrument at points along the Aura satellite track, and 2) conduct two long horizontal profiles of trace gases near the tropopause.

#### Specific objectives:

- Provide coincident measurements at the Aura MLS sampling points
- Northern profile for MLS validation
- Aura OMI overpass will occur at **1958 UT (1458 local)**.

**Flight Profile:** The Aura MLS track of observation points passes just west of Houston on Wednesday. The plane will takeoff at 1330 CDT (1:30 pm local or 1700 UT), fly northwest over Texas to pick up the MLS track at a point just south of Waco (point 3) and arrive at about 2pm. The plane will then fly NNW along the MLS track at an altitude of 43,000 feet. This altitude is just at the “dynamical” tropopause. Along its track, the plane will fly about 60 miles west of Dallas, close to Fort Worth, TX. The plane will continue northward across Oklahoma, Kansas, and Nebraska to a point near the South Dakota-Nebraska border (point 4). The plane will turn back south along this same track and ascend to 53,000 feet. This altitude is just at the “meteorological” tropopause. As the plane approaches point 3 it will climb to maximum altitude and then return to Ellington. Landing should be at about 7 pm.



*Flight profile as a function of latitude and altitude for the flight of June 22.*